What Is Claimed Is:

1. A method for manufacturing a component (5), in particular a deformation sensor, having a sensor element (15) which includes at least one region (12) that is sensitive with respect to strain or compression, as well as electrical structures (13, 14, 72) in connection therewith, the sensitive region (12) being produced on or within an activatable layer (10),
wherein a sacrificial layer (20) is produced on or within a substrate (21) and the activatable layer (10) is produced on top of the sacrificial layer (20); the at least one sensitive region (12) and at least a portion of the electrical structures (13, 14, 72) are produced on or within the activatable layer (10); a circumferential trench (11), which is interrupted by at least one connecting point (25), which connects the region of the sensor element (15) to the portion of the activatable layer (10) that lies outside the circumferential trench (11), is produced around the region of the sensor element (15), to be produced, having the at least one sensitive region (12) and at least the portion of the electrical structures (13, 14, 72); the sacrificial layer (10) below the region of the sensor element (15) is removed; the region of the sensor element (15) is fixated by means of a holding device (50) and the connecting points (25) are ruptured; and a transfer of the sensor element (15), fixated by the holding device (50), and a connection to a carrier (70) is implemented.

2. The method as recited in Claim 1,
wherein a layer of silicon oxide, in particular on a substrate (21) of silicon, is used as sacrificial layer (20), and a layer of polycrystalline or monocrystalline silicon is used as activatable layer (10).

3. The method as recited in Claim 1 or 2,
wherein the sensitive region (12) is produced as strain gauge resistor or strain gauge strip, in particular having a thickness of 1μm to 20 μm, in a surface region of the activatable layer (10) or on the surface of the activatable layer (10), in particular on or in the region of its top side or bottom side.

4. The method as recited in one of the preceding claims,
wherein the sensitive region (12) is produced by regional doping of the activatable layer (10), in particular by means of ion implantation or in-diffusion of foreign atoms.

5. The method as recited in one of the preceding claims,
wherein at least one contact surface (13), in particular in the form of a superficial metal coating by which the sensitive region (12) is electrically contactable, is produced on or in a vicinity of the sensitive region (12).

6. The method as recited in one of the preceding claims,
wherein the at least one connecting point (25) is formed as setpoint rupture joint and the mechanical stability of the connecting point (25) used as setpoint rupture joint is adjusted via the thickness of the activatable layer (10) and/or the form of the connecting point (25) in a plan view.

7. The method as recited in one of the preceding claims,
wherein the circumferential trench (11) is produced in a trench process, in particular in an anisotropic plasma etching process, in such a way that it reaches from the surface of the activatable layer (10) down to the sacrificial layer (20) in depth.

8. The method as recited in one of the preceding claims,
wherein, following the production of the circumferential trench (11), the sacrificial layer (20) is removed below the sensor element (15) by etching, in particular by vapor-phase etching with HF vapor, in such a way that it is held above a cavity (27) in a self-supporting manner by the at least one connecting point (25).

9. The method as recited in one of the preceding claims,
wherein the sensitive region (12) is created with a multitude of strain gauge resistors or strain gauge strips, which are interconnected with the aid of the electrical structures (13, 14, 72) to form a Wheatstone bridge circuit (14) or a half-bridge of a Wheatstone bridge circuit.

10. The method as recited in one of the preceding claims,
wherein at least a portion of the electrical structures (13, 14, 72), in particular in the form of an evaluation electronics (72) or control electronics and/or in the form of contact surfaces (13) and/or a bridge circuit (14), is produced on the sensitive region (12), or at least a portion of the electrical structures (13, 14, 72), in particular in the form of an evaluation electronics (72) or control electronics and/or in the form of contact surfaces (13) and/or a bridge circuit (14), is produced on or within the activatable layer (10).

11. The method as recited in one of the preceding claims,
wherein the rupturing of the connecting points (25) is implemented with the aid of a gripper, in particular a vacuum gripper (50), which grabs the sensor element (15) to be detached, and the substrate (21) is fixated during this rupturing by a holding device, in particular an electrostatic clamping device (40).

12. The method as recited in one of the preceding claims,
wherein the sensor element (15) is joined, especially bonded, to the carrier (70), in particular a steel substrate, at least partially via a membrane region (71) or a deformation region of the carrier (70).

13. The method as recited in one of the preceding claims,
wherein a multitude of sensor elements (15) is produced simultaneously on the substrate (21), and the sensor elements (15), are fixated by the holding device (50), in particular individually one after another, transferred after rupturing of the at least one connecting point (25), and connected to a carrier (70) assigned to the sensor element (15).

14. The method as recited in one of the preceding claims,
wherein the ruptured sensor elements (15) are adjusted relative to the carrier (70) individually assigned thereto and are mounted thereon, in a continuous operation.